

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method, comprising:

forming left and right channel signal paths in stereophonic processing of left and right channel input signals into left and right channel output signals suitable for stereophonic headphone listening, and forming at least one delay introducing a cross-talk signal path between the left and right channel signal paths, wherein the method further comprises

forming a separate monophonic signal path in order to equalize a frequency spectrum of a monophonic component of the left and right channel output signals by at least extracting from the left and right channel input signals an at least substantially monophonic signal component contained in ~~said~~ and common for both said left and right channel input signals,

processing the monophonic signal component to obtain a processed monophonic signal component, wherein the processing includes adjustment of the gain of said monophonic signal component, and

combining said processed monophonic signal component with at least one of the left and the right channel output signals.

2. (Original) The method according to claim 1, wherein the at least substantially monophonic signal component is extracted from the left and right input signals based on a momentary average value $(L+R)/2$ of said signals.

3. (Original) The method according to claim 1, wherein the at least substantially monophonic signal component is extracted from the left and right channel input signals based on similarity between said signals.

4. (Original) The method according to claim 1, wherein the processing of the monophonic signal component includes processing of a frequency spectrum of said monophonic signal component.

5. (Original) The method according to claim 4, wherein the processing of the frequency spectrum of said monophonic signal component is performed substantially within a frequency range ranging from 500 Hz to 2 kHz.

6. (Previously Presented) The method according to claim 1, wherein the processing of the monophonic signal component includes adjustment of the gain of said monophonic signal component by the gain magnitude of -5 dB.

7. (Original) The method according to claim 6, wherein the adjustment of the gain is performed in a time varying manner.

8. (Original) The method according to claim 1, wherein the processing of the monophonic signal component includes adding a delay to said monophonic signal component.

9. (Currently Amended) A device, comprising:

at least left and right channel signal paths in order to process left and right channel input signals into left and right channel output signals suitable for stereophonic headphone listening, and at least one delay introducing a cross-talk signal path between the left and right channel signal paths, wherein the device further comprises

a separate monophonic signal path in order to equalize a frequency spectrum of a monophonic component of the left and right channel output signals, said monophonic signal path comprising

a signal processor for extracting from the left and right channel input signals an at least substantially monophonic signal component contained in ~~said~~ and

common for both said left and right channel input signals, and for processing the monophonic signal component to obtain a processed monophonic signal component, the processing including adjusting the gain of said monophonic signal component, and for combining said processed monophonic signal component with at least one of the left or the right channel output signals.

10. (Previously Presented) The device according to claim 9, wherein the extracting the at least substantially monophonic signal component from the left and right channel input signals is based on determining a momentary average value $(L+R)/2$ of said signals.

11. (Previously Presented) The device according to claim 9, wherein the extracting the at least substantially monophonic signal component from the left and right channel input signals is based on similarity between said signals.

12. (Previously Presented) The device according to claim 9, wherein the processing of the monophonic signal component includes processing of a frequency spectrum of said monophonic signal component.

13. (Previously Presented) The device according to claim 12, wherein said signal processor comprises a digital Infinite Impulse Response or a Finite Impulse Response filter structure for said processing of the frequency spectrum of said monophonic signal component.

14. (Original) The device according to claim 12, wherein the processing of the frequency spectrum of said monophonic signal component is performed substantially within a frequency range ranging from 500 Hz to 2 kHz.

15. (Previously Presented) The device according to claim 9, wherein the processing the monophonic signal component includes adjusting the gain of said monophonic

signal component by the gain magnitude of -5 dB.

16. (Previously Presented) The device according to claim 15, wherein the signal processor is configured to adjust the gain in a time varying manner.

17. (Previously Presented) The device according to claim 9, wherein the signal processor is configured to add a delay to said monophonic signal component.

18. (Original) The device according to claim 9, wherein the device is a digital signal processing device.

19. (Currently Amended) A computer program stored on a computer readable medium, configured to carry out a method comprising:

forming left and right channel signal paths in order to process left and right channel input signals into left and right channel output signals suitable for stereophonic headphone listening, forming at least one delay introducing a cross-talk signal path between the left and right channel signal paths, and further

forming a separate monophonic signal path in order to equalize a frequency spectrum of a monophonic component of the left and right channel output signals by at least extracting from the left and right channel input signals an at least substantially monophonic signal component contained in ~~said~~ and common for both said left and right channel input signals,

processing the monophonic signal component to obtain a processed monophonic signal component, the processing including adjusting the gain of said monophonic signal component, and

further combining said processed monophonic signal component with at least one of the left and the right channel output signals.

20. (Previously Presented) A computer program according to claim 19, configured for execution in a digital signal processor.

21. (Currently Amended) A mobile appliance, comprising:

at least left and right channel signal paths in order to process the left and right channel input signals into left and right channel output signals suitable for stereophonic headphone listening, and at least one delay introducing a cross-talk signal path between the left and right channel signal paths,

a separate monophonic signal path in order to equalize a frequency spectrum of a monophonic component of the left and right channel output signals, said monophonic signal path for extracting from the left and right channel input signals an at least substantially monophonic signal component contained in ~~said~~ and common for both said left and right channel input signals, for processing the monophonic signal component to obtain a processed monophonic signal component, the processing including adjusting the gain of said monophonic signal component, and for combining said processed monophonic signal component with at least one of the left or the right channel output signals.

22. (Previously Presented) A mobile appliance according to claim 21, comprising a portable digital player or a digital mobile telecommunication device.

23. (Currently Amended) A device, comprising:

at least left and right channel signal paths in order to process the left and right channel input signals into left and right channel output signals suitable for stereophonic headphone listening, and at least one delay introducing a cross-talk signal path between the left and right channel signal paths, wherein the device further comprises

a separate monophonic signal path in order to equalize a frequency spectrum of a monophonic component of the left and right channel output signals, said monophonic signal path comprising at least means for extracting from the left and right channel input signals an at least substantially monophonic signal component contained in ~~said~~ and common for both said left and right channel input signals,

means for processing the monophonic signal component to obtain a processed monophonic signal component, the processing including adjusting the gain of said monophonic signal component, and means for combining said processed monophonic signal component with at least one of the left or the right channel output signals.

24. (Previously Presented) The device according to claim 23, wherein the means for processing the monophonic signal component include means for processing of a frequency spectrum of said monophonic signal component.